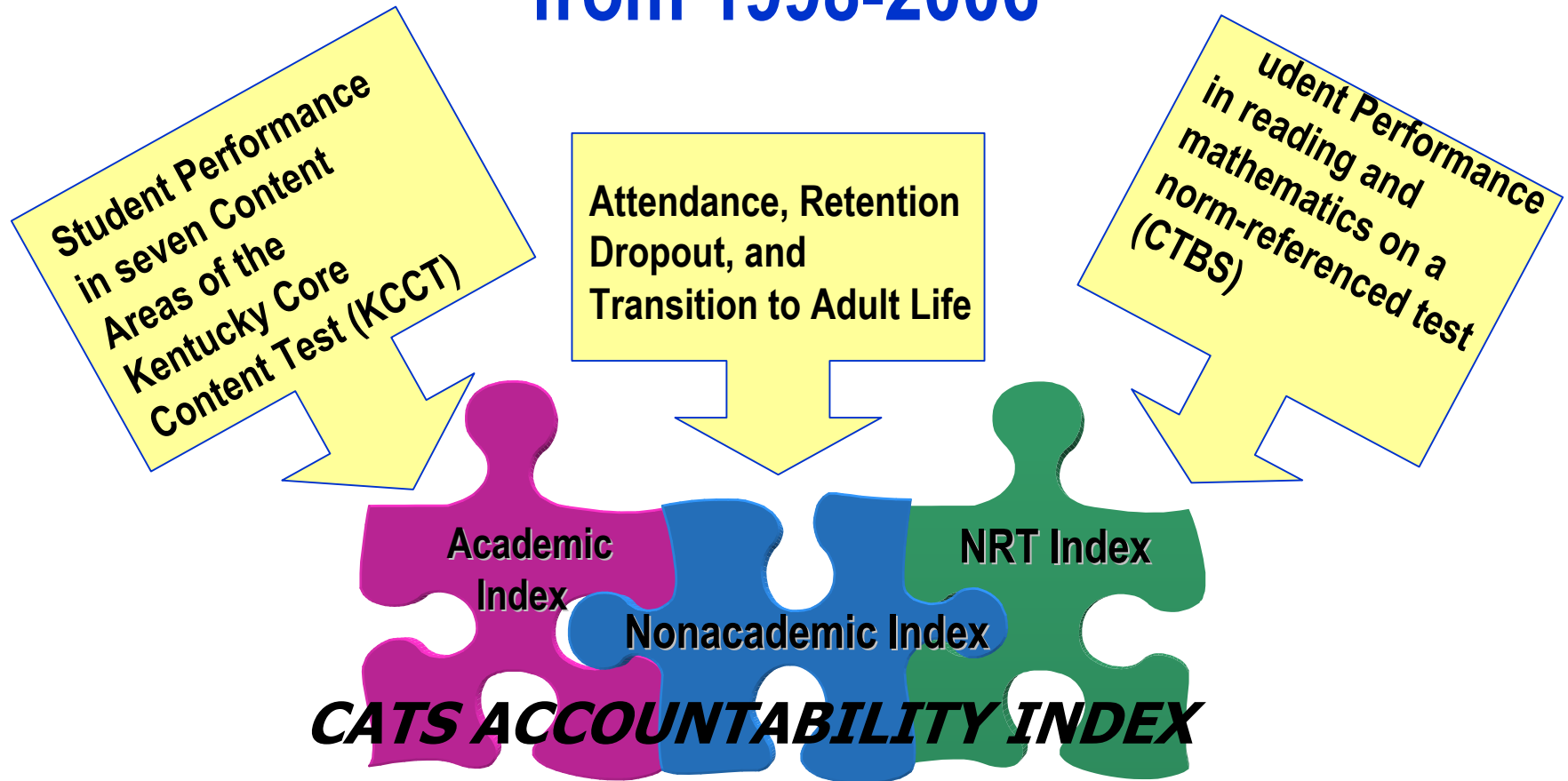


Commonwealth Accountability Testing System

Accountability: Putting the Pieces Together

Accountability Policy Discussion
Office of Assessment and Accountability
Kentucky Board of Education
September 6, 2006

CATS Academic and Nonacademic Measures from 1998-2006



Driving Forces for Change

- ◆ “Seven Steps Forward in Assessment”
- ◆ Alignment with federal No Child Left Behind Act
- ◆ New test design
- ◆ Senate Bill 130



CATS Issue: Weight

Elementary and Middle School

1. Should the weight of reading and mathematics be increased?

Legal Parameters

- Kentucky statute (158.6453) reflects goals for schools with high levels of achievement for all and requires assessments of Core Content in reading, mathematics, science, social studies, arts/humanities, practical living/vocational studies, and writing.
- No Child Left Behind Act requires annual assessment of reading and mathematics in grades 3-8 and once at high school and the assessment of science once in each grade span (elementary, middle and high).

CATS Issue: Weight

Elementary and Middle School

Recommendation

Increase the weights for reading and mathematics to

- 21% for reading and 21% for mathematics at elementary, and
- 19% for reading and 19% for mathematics at middle.

Rationale

- Values the broad curriculum exposure of all content areas by their inclusion in the accountability formula.
- Recognizes the annual assessment of reading and mathematics in grades 3—8 as required by No Child Left Behind.

CATS Issue: Measure



Elementary and Middle School

- a. **Should accountability calculations include a measure of growth using grade-to-grade assessments in reading and mathematics (3—8) when longitudinal data is cumulated?**

Legal Parameters

- Kentucky statute (158.6453) requires a technically-sound longitudinal measure.
- Kentucky needs approval by US Department of Education to use a growth model for federal purposes.

Recommendation

Beginning immediately with accountability taking effect when two years of data are available, include a growth measure as part of the reading and mathematics indices.

Rationale

- Honors the statutory requirement for a longitudinal measure in the assessment program.
- Recognizes school-level progress toward goal attainment.

CATS Issue: Measure



Growth Calculation Information

Elementary: $\text{KCCT reading Index} + \text{reading Growth Index} = 21\%$
 $\text{KCCT mathematics Index} + \text{mathematics Growth Index} = 21\%$

Middle: $\text{KCCT reading Index} + \text{reading Growth Index} = 19\%$
 $\text{KCCT mathematics Index} + \text{mathematics Growth Index} = 19\%$

Note: The National Technical Advisory Panel on Assessment and Accountability (NTAPAA) will advise on psychometric procedures to look longitudinally at student growth.

CATS Issue: Weight



High School

2. Should the focus on all content areas be maintained?

Legal Parameters

➤ Kentucky statute (158.6453) reflects goals for schools with high level of achievement for all and requires assessments of Core Content in reading, mathematics, science, social studies, arts/humanities, practical living/vocational studies, and writing.

Recommendation

Retain equal weights for the content areas of reading, mathematics, science, social studies, and writing and the combination of arts/humanities and practical living/vocational studies.

Rationale

- Values the broad curriculum exposure of all content areas through equal inclusion in the accountability formula.

CATS Issue: Measure



High School

- a. Should items from the ACT be utilized and augmented with items from the Kentucky Core Content Test to calculate indices for reading, mathematics, science and on-demand writing?

Legal Parameters

- Senate Bill 130 requires college readiness measures.
- Senate Bill 130 requires periodic study of the content coverage of ACT.
 - Determine extent core content is measured in reading, mathematics, and science.
 - Seek advice from Office of Education Accountability (OEA), School Curriculum, Assessment, and Accountability Council (SCAAC) and NTAPAA concerning reduction of items on CATS.

CATS Issue: Measure



Recommendation

Beginning in 2008 after first administration of ACT, utilize aligned items from the ACT and augment with Kentucky Core Content Test (KCCT) items to calculate indices for reading, mathematics, science and on-demand writing.

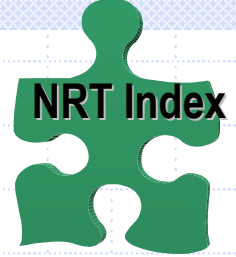
Rationale

- Provides for efficiency in testing by reducing redundancies.
- Maintains a standards-based accountability system.
- Allows Kentucky to comply with federal requirements.

ACT and KCCT Calculation Information

ACT items that measure Kentucky's standards form the basis of the indices in content areas. ACT items combine with Kentucky-developed KCCT items to produce a Kentucky scale for each subtest (reading, mathematics, science). Also, ACT English items measuring language usage may contribute to the on-demand writing score depending upon the results of the alignment study.

CATS Issue: Weight



Elementary and Middle School

1. Should a Norm-Referenced Index be included at elementary and middle school?

Legal Parameters

- Senate Bill 130 requires administration of high school and college readiness exams in lieu of a NRT in middle and high schools.
- Kentucky statute (158.6453) requires a customized or commercially available norm-referenced test to measure core content to the extent possible.

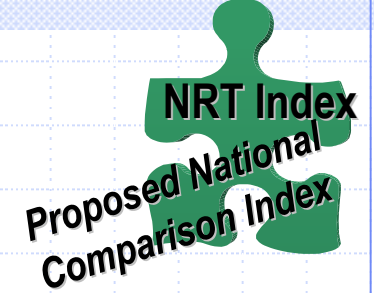
Recommendation

Do not include a Norm-Referenced Index. Redistribute the 5% to all content areas.

Rationale

- Provides for efficiency in testing by reducing redundancies in reading and mathematics assessments in grades 3—8.
- Does not utilize EXPLORE, a non-secure test form.

CATS Issue: Weight



High School

2. Should a national comparison measure using norms be included?

Legal Parameters

- Senate Bill 130 requires administration of high school and college readiness exams in lieu of a NRT in middle and high school.
- Kentucky statute (158.6453) requires a customized or commercially available norm-referenced test to measure core content to the extent possible.

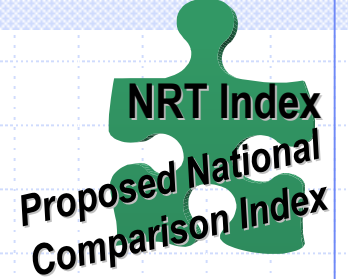
Recommendation

Assign the 5% weight of the NRT Index to a new National Comparison Index (NCI), a value calculated using normative data.

Rationale

- Values the student composite data from PLAN and ACT and provides a national comparison.

CATS Issue: Measure



High School

- a) Should national comparisons of PLAN and ACT composite scores be included?

Recommendation

In 2007, after the first administration of PLAN in fall 2006, generate the National Comparison Index (NCI) based solely on PLAN. After the first administration of ACT in 2007-08, generate the NCI index by combining PLAN and ACT results.

Rationale

- Values the student composite data from PLAN and ACT and provides a national comparison.

ACT and PLAN for NRT Calculation Information

- Construct an index from normative data base on the composite scores of students.

CATS Issue: Weights

Elementary, Middle, and High

1. **Should the total weight of the Nonacademic Index and the distribution of weights within the index be changed?**

Legal Parameters

➤ Kentucky statute (158.6453) includes mandates to increase attendance rates, decrease retention rates, decrease dropout rates at middle and secondary levels and improve transition to adult life (work, postsecondary education and military) at the secondary school level.

Recommendation

Change the total weight and the distribution of weights within the Nonacademic Index.

Elementary 3% (2% Attendance + 1% Retention)

Middle 3% (1.5% Attendance + 1% Retention + .5% Dropout)

High 11% (1.5% Attendance + .5% Retention + 3.5% Dropout + 5.5% Transition to Adult Life)

Rationale

- Honors the statutory requirements for nonacademic factors, but uses new methods to measure these factors that better define school performance.

Elementary, Middle, and High School

a) **How should attendance be measured?**

Recommendation

Beginning in 2008, set benchmarks for individual student attendance.

Rationale

- Reinforces individual work ethic and importance of being engaged in learning process by setting individual student targets based on days in school and on-time behavior.
- Expands the factor of attendance beyond the current percent attendance that is the basis of Average Daily Attendance (ADA) in the SEEK formula.
- Promotes attention to students that have chronic problems and recognizes schools that successfully address these issues.
- Supports Kentucky statute 159.150 regarding truancy policies.

Attendance Rate Calculation Information

Number of students with less than three (3) unexcused absences plus the number of students with less than (3) unexcused tardies divided by twice the total number of students.

Note: Change in the calculation of measures will require conversations with stakeholders and research on data accuracy and collection methods.

Elementary and Middle School

- b) **Should retention at elementary and middle school and dropout at middle school be captured in a rate that reflects the number of years students use to complete each school level?**

Recommendation

Beginning in 2008, use Completion Rate (number of years a student spends in each grade span) to capture both Retention and Dropout rates.

Rationale

- Honors the statutory requirements for nonacademic factors, but uses new methods to measure factors that better define school performance.

Completion Rate Calculation Information

Elementary: 1% Retention = 99% Completion Rate

Middle: 1% Retention + .5 Dropout = 98.5% Completion Rate

Note: Change in the calculation of measures will require conversations with stakeholders and research on data accuracy and collection methods.

CATS Issue: Measure

High School

c) **Beginning in 2007-08, should the Graduation Rate be used to capture both Dropout and Retention?**

Legal Parameters

- The No Child Left Behind Act requires that the graduation rate be used as the other academic indicator at the high school level and be calculated by a specified formula.
- Kentucky Statute (158.145) requires that no school will have an annual dropout rate that exceeds five (5) percent.

Recommendation

Beginning in 2008, use Graduation Rate to capture both Dropout and Retention.

Rationale

- Uses NCLB-required graduation rate to report Kentucky statutory requirements of Dropout and Retention factors.
- Values progress and school programs that assist students in completing the K-12 experience not permitted under NCLB.

Note: Dropout will still be reported, but not calculated separately in the Nonacademic Index.

CATS Issue: Measure

Graduation Rate Calculation Information

- NCLB Graduation Rate calculation is currently generated by dividing the number of on-time completers (4-year graduates) by all completers plus dropouts across four years.
- CATS Graduation Credit to include:
 - 5-year graduates
 - 3-year graduates
 - Students completing secondary GED
 - Students receiving Certificates of Attainment (1 % cap)

NCLB Graduation Rate + CATS Graduation Credit = 4%

Note: Kentucky first implemented student tracking with unique identifiers in 2005-06. When this cohort of students completes high school and is reported (2009-10), Kentucky will change the Graduation Rate calculation and implement the formula promoted by the National Governors Association that will establish a national definition.

High School

- d) **Should ACT, WorkKeys and Advanced Placement exams be included as measures of successful Transition to Adult Life?**

Legal Parameters

- Senate Bill 130 requires ACT and WorkKeys assessments, and that students meeting postsecondary benchmarks should be advised to enroll in Advanced Placement courses.

Recommendation

Beginning in 2007-08, utilize ACT, WorkKeys and Advanced Placement exams as measures of successful Transition to Adult Life.

Rationale

- Allows Kentucky to recognize new data that will be available in the assessment system for measures of Transition to Adult Life.
- Promotes successful completion of Advanced Placement (AP) courses based on student performance on AP exams and successful participation of students in low SES status.

CATS Issue: Measure

Transition Rate Calculation Information

Category Score

- Every student may earn credit for the school in no more than one category.

Category 1: Students reaching the

ACT reading postsecondary Benchmark (18)

ACT mathematics postsecondary Benchmark (19)

Category 2: Students earning a WorkKeys Employability Certification
(Kentucky Gold or Silver levels)

Students earning state or national skills standards certification

Category 3: Students receiving military acceptance

Credit

- Transition to Adult Life Kentucky Credit to include:
Scores on Advanced Placement exams of 3-5 (Kentucky college course credit)
Scores on ACT mathematics of 22 or above
Students with low SES status reaching ACT benchmarks

Category Score + Credit = Transition Rate (5.5%)

Note: Continue to use current transition criteria for Certificate of Attainment students.